

CLAIMS

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A method of pre-processing image data, said
2 method including steps of
3 applying luminance and chrominance data of
4 consecutively presented lines of data to respective
5 data inputs of a filter, and
6 applying hybrid filter coefficients to said
7 filter to concurrently obtain spatially filtered and
8 chrominance converted data.
- 1 2. A method as recited in claim 1, wherein said
2 consecutively presented lines are lines of a
3 progressive scan format.
- 1 3. A method as recited in claim 1, wherein said
2 consecutively presented lines are lines of an odd
3 field or an even field of an interlaced scan format.
- 1 4. A method as recited in claim 3, further
2 including a step of
3 altering said hybrid filter coefficients for
4 respective ones of said odd field and said even
5 field.

1 5. A method as recited in claim 1, further
2 including a step of
3 removing alternate lines of said chrominance
4 converted data.

1 6. A method as recited in claim 1, including the
2 further steps of
3 multiplying said luminance and chrominance data
4 by said hybrid filter coefficients for respective
5 ones of said consecutively presented lines to
6 produce weighted luminance and chrominance values,
7 and
8 summing said weighted luminance and chrominance
9 values.

1 7. A pre-processing circuit for image data
2 including
3 a filter having inputs to receive luminance and
4 chrominance data corresponding to consecutive image
5 data lines, and
6 means for applying hybrid filter coefficients
7 to said filter such that spatially filtered and
8 chrominance converted data are concurrently
9 developed by said filter.

1 8. A pre-processing circuit as recited in claim 7,
2 further comprising
3 a buffer for storing said consecutive lines of
4 said image data and outputting said image data to
5 said filter.

1 9. A pre-processing circuit as recited in claim 7,
2 wherein said consecutive image data lines correspond
3 to a progressive scan format.

1 10. A pre-processing circuit as recited in claim 7,
2 wherein said consecutive image data lines correspond
3 to an odd field or an even field of an interlaced
4 scan format.

1 11. A pre-processing circuit as recited in claim
2 10, further including
3 means for altering said hybrid filter
4 coefficients for respective ones of said odd field
5 and said even field.

1 12. A preprocessing circuit as recited in claim 7,
2 further including
3 means for sub-sampling said chrominance
4 converted data.